

**REMARKS**

Claims 1 through 9 are pending in this application. Claims 8 and 9 have been added. Care has been exercised to avoid the introduction of new matter. Indeed, adequate descriptive support for the present Amendment should be apparent throughout the originally-filed disclosure as, for example, Fig. 1 and the related discussion thereof in the written description of the specification and the first full paragraph on page 10 of the written description. Applicants submit that the present Amendment does not generate any new matter issue.

A clean copy of new claims 8 and 9 appear in the Appendix hereto.

**Oath/Declaration**

The Examiner asserted that the declaration or oath is defective and required a new oath, manifestly due to a typographical oversight in the provisional application which was corrected in the Preliminary Amendment submitted August 6, 2001 (Paper No. 3), as recognized by the Examiner. A new Declaration has been prepared and will be submitted promptly upon execution by the inventors.

**Claims 1 and 7 were rejected under 35 U.S.C. §102 for lack of novelty as evidenced by Ohkijima et al.**

In the statement of the rejection, the Examiner asserted that Ohkijima et al. disclose a magnetic recording medium identically corresponding to that claimed. The Examiner recognized that Ohkijima et al. do not disclose that the first magnetic layer exhibits a higher SMNR than the second magnetic layer. However, the Examiner said such is inherent. This rejection is traversed as factually erroneous.

The factual determination of lack of novelty under 35 U.S.C. §102 requires identical disclosure in a single reference of each element of a claimed invention, such that the identically claimed invention is placed into the recognized possession of one having ordinary skill in the art. *Elan Pharmaceuticals Inc. v. Mayo Foundation*, \_\_\_ F.3d \_\_\_, *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917. There are significant differences between the claimed magnetic recording medium and that disclosed by Ohkijima et al. that scotch the factual determination that Ohkijima et al. identically describe the claimed invention within the meaning of 35 U.S.C. §102.

Firstly, the claimed magnetic recording medium, as recognized by the Examiner, contains first and second **magnetic** layers. In other words, a first **magnetic** layer, and a second **magnetic** layer on the first **magnetic** layer. The magnetic recording medium disclosed by Ohkijima et al. does **not** contain two **magnetic** layers. Indeed, as expressly stated by Ohkijima et al., the first layer, which Ohkijima et al. call an "intermediate layer" column 3, line 34, and what the Examiner erroneously calls the first magnetic layer, is not magnetic because the saturation magnetic flux density of the intermediate layer is set to such a small value that the influence of the intermediate layer on the magnetic recording medium can be completely eliminated. See, for example, column 3 of Ohkijima et al., lines 29 through 37. On this basis alone the imposed rejection is not factually viable and should be withdrawn.

Further, the Examiner's invocation of the doctrine of inherency to establish that the first intermediate layer (what the Examiner erroneously calls the magnetic layer) has a higher SMNR than the **actual magnetic layer** or what the Examiner calls the second magnetic layer is, on its face, technologically wrong, because the intermediate layer (the Examiner's first magnetic layer) has no magnetic influence whatsoever on the magnetic recording medium because it is not magnetic.

As the Examiner should be aware, in order to rely upon the doctrine of inherency, the Examiner is required to identify facts which compel the determinations that the allegedly inherent feature **necessarily** flows from the teachings of the applied prior art **and** would have been **recognized** by one having ordinary skill in the art. *Elan Pharmaceuticals Inc. v. Mayo Foundation, supra*; *Crown Operations International Ltd. v. Solutia Inc., supra*. Not only has the Examiner failed to identify sufficient facts in order to shift the procedural burden of going forward, but the disclosure of Ohkijima et al. that the intermediate layer has **no impact on the magnetic properties factually undermines the Examiner's unsupported assertion of inherency**.

The above argued functionally significant differences between the claimed invention and the magnetic recording medium disclosed by Ohkijima et al. undermine the factual determination that Ohkijima et al. identically describe the claimed invention within the meaning of 35 U.S.C. §102. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986). Applicants, therefore, submit that the imposed rejection of claims 1 and 7 under 35 U.S.C. §102 for lack of novelty as evidenced by Ohkijima et al. is not factually viable and, hence, solicit withdrawal thereof.

**Claims 1 and 5 through 7 were rejected under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Zhang et al.**

In the statement of the rejection, the Examiner **admitted** that Moroishi et al., the primary reference, do **not** disclose the concept of providing first and second magnetic layers, wherein the first magnetic layer has a higher SMNR than the second magnetic layer or wherein the second magnetic layer has a higher Ms than the first magnetic layer, which, of course, are significant

features of the present invention. In other words, the primary reference teaches nothing. The Examiner then proceeds to reconstruct the present invention starting from nothing, improperly guided by Applicants' disclosure. *Panduit Corp. v. Dennison Mfg. Co.*, 774 F.2d 1082, 227 USPQ 337 (Fed. Cir. 1985). This rejection is traversed as factually and legally erroneous.

#### **Due Process of Law**

There is no such reference as "Zhang et al. (IEEE Trans. Mag., 32(5), 1996, 3590 - 3592)". The publication is authored by Song et al., as apparently recognized by the Examiner, since it is subsequently applied in rejecting claim 2. Two Zhang references were cited on Applicants' IDS, but no Zhang et al. Accordingly, Applicants are left to shoot arrows in the dark guessing at what the rejection is. This constitutes a violation of due process of law. *In re Mullin*, 481 F.2d 1333, 179 USPQ 97 (CCPA 1973). On this basis alone, the rejection should be withdrawn.

#### **There Is No Motivation**

In rejecting a claim under 35 U.S.C. §103, the Examiner must point to a **source** in the applied references for **each claim limitation** and a **source** for the requisite **motivation**. *Smiths Industries Medical System v. Vital Signs Inc.*, 183 F.3d 1347, 51 USPQ2d 1415 (Fed. Cir. 1999). In attempting to establish the motivational element, the Examiner is required to make a "clear and particular" and factual inquiry and, based upon that factual inquiry, **explain why** one having ordinary skill in the art would have been realistically led to modify particular prior art, **in this case the particular magnetic recording medium disclosed by the primary reference to Moroishi et al., to arrive at a claimed invention**. *In re Lee*, 237 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002). That burden has **not** been discharged.

Specifically, the magnetic recording medium disclosed by the primary reference to Moroishi et al. **must have a spacer layer between** the two magnetic layers. Further, as apparent from column 13, lines 25 through 29, each magnetic layer is formed of the **same** material. Naturally, Moroishi et al., as acknowledged by the Examiner, do **not** disclose that the first magnetic layer has an SMNR greater than the second magnetic layer or that the second magnetic layer has an Ms greater than the first magnetic layer. The Examiner turns to secondary references which are of no avail.

Specifically, the Examiner asserts that Zhang discloses the concept of forming a first magnetic layer with a higher SMNR than the second magnetic layer. Assuming, arguendo, the Examiner is referring to one of the Zhang references cited in the IDS submitted by Applicants, the Examiner's reliance is misplaced. This is because according to the teachings of Zhang, **two different** magnetic layers are deposited **directly** on each other with **no spacer layer therebetween**. **How that teaching can be intermeshed into the teachings of Moroishi et al. who must have a spacer layer and employ magnetic layers of the same material has not been articulated on this record with clarity. *In re Lee, supra*.** In order to impress the teachings of Zhang into the magnetic recording medium disclosed by Moroishi et al., one having ordinary skill in the art would have to **eliminate the spacer layer** which is **required** by Moroishi et al. but condemned by Zhang. One having ordinary skill in the art would then have been required to manipulate the compositions of the magnetic layers **against** the teachings of Moroishi et al.

What the Examiner apparently sees, but does not appreciate, is the fact that the objectives of Zhang are achieved by using the first magnetic layer to influence the growth of the second magnetic layer, which is **impossible** in the magnetic recording medium of Moroishi et al. because of the **required spacer layer** between the magnetic layers. Applicants strongly submit that one having

ordinary skill in the art would **not** possibly have been led by Zhang to proceed **against** the teachings of Moroishi et al. by forming one magnetic layer directly on the other magnetic layer of different compositions, particularly since Moroishi et al. **require a spacer** layer therebetween. Any such modification would proceed **against** the teachings of Moroishi et al. One having ordinary skill in the art cannot be considered realistically motivated to modify a reference in a manner **inconsistent** with the disclosed objective. *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992); *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); *In re Schulpen*, 390 F.2d 1009, 157 USPQ 52 (CCPA 1968).

So too with Miyazaki et al. who appeared to deposit the second magnetic layer directly on the first magnetic layer; whereas, Moroishi et al. require a spacer layer therebetween. *In re Fritch, supra.*; *In re Gordon, supra.*; *in re Schulpen, supra.*

It is not apparent why one having ordinary skill in the art would have been realistically led to extract isolated teachings from secondary references associated with structures completely different from that of the primary reference and then somehow arrive at two of the significant features of the claimed invention which are admittedly absent from the primary reference. Even so, the Examiner has not pointed to any teachings which would have realistically led one having ordinary skill in the art to combine both the concept of forming the first magnetic layer with a higher SMNR than the second magnetic layer **and** then forming the second magnetic layer with a higher Ms than the first magnetic layer. See *In re Lee, supra.*

It should, therefore, be apparent that one having ordinary skill in the art would **not** have been realistically motivated to combine the applied references to arrive at the claimed invention, absent **improper** reliance by an Applicant's disclosure. *Panduit Corp. v. Dennison Mfg. Co.*

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Applicants, therefore, submit that the imposed rejection of claims 1 and 5 through 7 under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Miyazaki et al. and "Zhang et al." is not factually or legally viable and, hence, solicit withdrawal thereof.

**Claim 2 was rejected under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Miyazaki et al., "Zhang et al.", Yoshikawa et al., the acknowledged prior art and Song et al.**

This rejection is traversed.

Claim 2 depends upon independent claim 1. Applicants incorporate herein the arguments previously advanced in traversing in the imposed rejection of claim 1 under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Miyazaki et al. and Zhang. The additional references do not cure the argued deficiencies in the attempted combination of Moroishi et al. in view of Miyazaki et al. and Zhang. Further, the additional exposition by the Examiner runs against the teachings of Moroishi et al. who want to use magnetic layers of the same composition.

Applicants, therefore, submit that the imposed rejection of claim 2 under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Miyazaki et al., "Zhang et al.", Yoshikawa et al., the acknowledged prior art and Song et al. is not factually or legally viable and, hence, solicit withdrawal thereof.

**Claims 3 and 4 were rejected under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Miyazaki et al., Zhang et al., Yoshikawa et al., the acknowledged prior art, Song et al. and Bian et al.**

**Claim 6 was rejected under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Miyazaki et al., Zhang et al. and Ross et al.**

Each of the above rejections under 35 U.S.C. §103 is traversed. Specifically, each of claims 3, 4 and 6 depend from independent claim 1. Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claim 1 under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Miyazaki et al. and Zhang et al. The additional references to Yoshikawa et al., the acknowledged prior art, Song et al, Bian et al. and Ross et al. do not cure the argued deficiencies in the attempted combination of Moroishi et al., Miyazaki et al. and Zhang et al., except to exacerbate the fact that the Examiner is attempting to reconstruct the magnetic recording medium of Moroishi et al. **against the express teachings of Moroishi et al.**

Applicants, therefore, submit that the imposed rejection of claims 3 and 4 under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Miyazaki et al., Zhang et al., Yoshikawa et al., the acknowledged prior art, Song et al. and Bian et al., and the imposed rejection of claim 6 under 35 U.S.C. §103 for obviousness predicated upon Moroishi et al. in view of Miyazaki et al., Zhang et al. and Ross et al., are not factually or legally viable and, hence, solicit withdrawal thereof.



**New claims 8 and 9.**

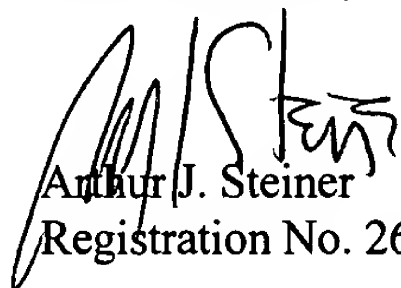
New claims 8 and 9 are free of the applied prior art by virtue of their dependence upon independent claim 1, the patentability of which has been argued supra. Further, claim 8 further distinguishes over Moroishi et al. by requiring the second magnetic layer to be directly on the first magnetic layer. In addition, it is not apparent wherein the applied prior art would have suggested the structure defined in claim 9 having the recited thicknesses for the first and second magnetic layers.

It should, therefore, be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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APPENDIX

New claims 8 and 9 read as follows:

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8. (New) The magnetic recording medium according to claim 1, wherein the second magnetic layer is directly on the first magnetic layer.

*[Handwritten mark]*

9. (New) The magnetic recording medium according to claim 1, wherein:  
the first magnetic layer has a thickness of about 100Å to about 130Å; and  
the second magnetic layer has a thickness of about 40Å to about 100Å.

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